

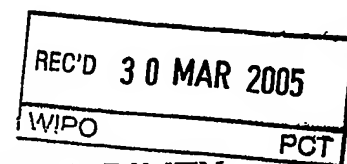
PATENT COOPERATION TREATY


PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)



Applicant's or agent's file reference 95 505 a/ea		FOR FURTHER ACTION		See Form PCT/PEA/416
International application No. PCT/EP 03/09816		International filing date (day/month/year) 04.09.2003		Priority date (day/month/year) 04.09.2003
International Patent Classification (IPC) or national classification and IPC H04Q7/38				
Applicant TELEFONAKTIEBOLAGET LM ERICSSON (PUBL) et al.				
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 7 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> sent to the applicant and to the International Bureau a total of sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>				
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input checked="" type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input checked="" type="checkbox"/> Box No. VIII Certain observations on the international application</p>				
Date of submission of the demand 28.02.2005		Date of completion of this report 29.03.2005		
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized Officer Mele, M Telephone No. +49 89 2399-7994		

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**INTERNATIONAL PRELIMINARY REPORT
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International application No.
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Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):*

Description, Pages

1-12 as originally filed

Claims, Numbers

1-5 as originally filed

Drawings, Sheets

1/3-3/3 as originally filed

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-5
	No: Claims	
Inventive step (IS)	Yes: Claims	1-5
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-5
	No: Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

Re Item I

Basis of the report

Reference is made to the following document:

D1: WO 02/ 35 879 A1

D2: US 6 097 951 A

Re Item V

**Reasoned statement with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

1. The present application meets the requirements of **Articles 33(2) and 33(3) PCT**, because the subject-matter of **Claim 1** is novel and involves an inventive step for the following reasons.

Document **D1**, which is considered to represent the most relevant state of the art, discloses, according to features of **Claim 1** (applying the terminology of present **Claim 1** and the references to **D1**), a method of controlling a communication control entity (MSC "203".."205", fig. 3) in a communication control part of a mobile communication network (MSC-pool "201", fig. 3) that comprises said communication control part and an access part (access network "314", fig. 3), said communication control entity acting as a primary communication entity (controlling-MSC: page 16, lines 10-24) for a call communication and belonging to a pool of communication control entities (MSC-pool "201", fig. 3) among which no handover procedure is conducted (page 2, lines 9-32) as long as a mobile communication device moves among service realms (radio cells "315" and "316", fig. 3) associated with a predetermined number of access control entities (base stations "212", "213" and control node "207", fig. 3) that are connected to said pool.

The subject-matter of **Claim 1** differs from the disclosure of **D1** in that said method comprises the steps of :

- receiving a handover request for removing a first secondary communication control

entity from a control process for controlling said call communication and adding a second secondary communication control entity,

- determining whether said second secondary communication control entity belongs to said pool. and if said second secondary communication control entity belongs to said pool rejecting to add said second secondary communication control entity to said control procedure and instead communicating with the mobile communication device of which said given call communication is being controlled via an access control entity connected to said primary communication control entity;

The subject-matter of **Claim 1** is therefore novel (**Article 33(2) PCT**).

The objective problem solved by these distinguishing features of **Claim 1** may be regarded by the skilled person as the management of a pool of communication control entities.

Document **D1** discloses a method of inter and intra-MSC handover wherein also the communication control entities are divided into those belonging to a MSC-pool and those situated externally with respect to this MSC-pool. However document **D1** is silent about managing this MSC-pool, therefore no hint is given about adding or removing entities of this MSC-pool. On the other hand, document **D2** teaches a similar inter-MSC handoff method, but this disclosure is also silent about MSC-pool management.

Therefore, the combination of features of **Claim 1** is neither known from **D1**, nor rendered obvious by the other available prior art.

The subject-matter of **Claim 1** therefore involves an inventive step (**Article 33(2) PCT**).

2. The same considerations as made in respect of independent **Claim 1** are also valid for independent **Claims 4 and 5**, which contain a corresponding feature combination as **Claim 1** in terms of claims relating to a computer program product and an apparatus.

Therefore, the subject-matter of independent **Claims 4 and 5** is novel and involves an

inventive step and satisfy the criterion set forth in **Articles 33(2) and 33(3) PCT**.

3. **Claims 2 and 3** are dependent on **Claim 1** and as such also meet the requirements of the PCT with respect to novelty and inventive step (**Articles 33(2) and 33(3) PCT**).

Re Item VIII

Certain observations on the international application

Although **Claims 1 to 5** meet the requirements of **Articles 33(1)-(4) PCT** with respect to novelty and inventive step, the following is however noted:

4. The formulation of the present **Claim 5** requires a revision, in order to avoid any doubts as to the category of these claims (PCT Guidelines 5.37). In this respect, some features are formulated in terms which rather correspond to features of a method (e.g. expressions such as "as long as...moves", "when...is acting as...", "when...is received", "to...communicate", "is being controlled", etc.) while the claims are generally directed to an apparatus; a reformulation in terms of features clearly falling in the apparatus category is hence necessary (e.g. "means for" or "means arranged to").
5. On description page 9, line 12 the indicated fig. 3 does not exist. At line 32, in place of the referred fig. 2 (showing a flow chart descriptive of the method of Claim 1) it appears more appropriate to indicate the system either fig. 1a or fig. 1b.

Re Item VII

Certain defects in the international application

6. Independent **Claims 1, 4 and 5** have not been drafted in the two-part form, as recommended by **Rule 6.3(b) PCT**, which in the present case would be appropriate, with those features known in combination from the prior art (document **D1**) being placed in the preamble (Rule 6.3(b)(I) PCT) and with the remaining features being included in the characterising part (Rule 6.3(b)(ii) PCT).
7. In order to meet the requirements of **Rule 5.1(a)(ii) PCT**, the cited documents **D1 and D2** should have been acknowledged and briefly discussed in the opening part of the

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(SEPARATE SHEET)**

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description.